

E-5080
31 July 1957

MEMORANDUM TO THE FILE

FROM: [REDACTED]

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SUBJECT: Trip to [REDACTED]

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1. [REDACTED] visited the [REDACTED]
[REDACTED] on July 8, 9 and 10, 1957. [REDACTED]
[REDACTED] has been awarded a contract for the production of the two
Mobile Message Centers; therefore the purpose of the trip was to dis-
cuss our specifications for the van with the [REDACTED] engineers, and to
inspect their manufacturing plant and facilities. The following com-
pany officials were contacted:

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[REDACTED]

2. The major part of the first day was spent on a conducted tour
by Mr. [REDACTED] manufacturing plant at [REDACTED]. A
great proportion of the business the company is currently engaged in is
fulfilling an Air Force contract for three hundred trailer vans for pro-
ject "Four Wheels". The vans are similar almost in every detail to the
ones we require; consequently, we had an opportunity to view the vans
at all stages of their production—from the first stage, the manufactur-
ing of the individual floor panel members; including the middle stage,
the attachment of the dolly to the trailer under carriage; to the last
stage, final inspection. At each assembly point the van appeared to be
well fabricated and only the best construction practices were being used.

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3. The remainder of the day was spent in discussion with [REDACTED]
as to the possibility of using a foam-in-place plastic for the inner con-
struction of the van instead of the honey-comb type of construction, and the
necessary modifications to the van in case, at a later date, we decide to
install an air conditioner. We also discussed the difference in cost of
these two modifications.

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4. With the foam-in-place plastic construction, using hat-sections
as braces, we would be able to place the braces between the two aluminum
skins which would allow us to install parts cabinets and equipment on the
inside walls of the van; whereas with honey-comb type of construction, braces

have to be mounted to the floor and the equipment of parts cabinets mounted on these braces because the thin aluminum walls will not support the weight of the equipment. Also, with the foam-in-place plastic the van would be considerably lighter. (The [] is manufacturing for the Air Force both the 8 and 12 foot Helicop-But with the foam-in-place plastic type of construction.) [] informed us that their engineers were making an engineering study to ascertain the increase in cost for the foam-in-place type of construction.

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5. The [] Engineers are also conducting another study to determine the size of the exhaust blower necessary for the proper ventilation of the van. However, they were concerned that we are not air conditioning our two vans, for their studies showed for proper ventilation it was necessary to air condition all the Air Force vans. Because of space required for the air conditioner, it will be necessary to install the air conditioner on another dolly along with a larger generator if our supply generator cannot handle the additional load. The cooled air would then be feed by duct into the van. The Signal Center Van along with the air conditioner and its dolly can still be placed within a C-119 aircraft.

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6. The next day we were informed by [] that the extra cost for the initial set up of the foam-in-place plastic construction, such as tooling, jigs and fixtures, would run into the thousands of dollars and they did not believe that we could absorb this extra cost on the quantity of vans that we require. Also, the cost of the air conditioner on a separate dolly would be \$3,390.

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7. The second day was spent with [] going over the specifications. Each requirement of our specification was discussed in detail to make certain that there was a complete understanding by the company of our requirements. As mentioned in paragraph 2, [] System is supplying the Air Force with 300 vans similar to the vans we require; therefore, only a few modifications will have to be made to the vans on the production line to meet our specifications. The [] engineers prefer to adhere to the Air Force van construction as much as possible for two reasons:

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1. The Air Force Van has been tested both physically and operationally by [] in conjunction with the Air Force for a number of installations, i.e. transmitter van, receiver van, message center, radio relay etc., and this type of van construction has proven satisfactorily for all of the above installations.

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2. The fewer the modifications on the van the quicker the delivery, for it depends upon the number of changes in the van as to what stage along the production line they will have to make these changes on the Air Force van to comply with our specifications.

The changes they suggested and our conclusions are noted below:

1. They recommended that the two message ports be moved from the rear of the van around to the left and right back sides of the van. With the ports on the rear of the van, one port would always be blocked by the rear door when open which would limit us to one message port. This change was agreed to.
2. The two mobile masts be moved from the left and right rear side of the trailer to the rear of the trailer. On the rear of the trailer the masts would have less chance of being damaged. With this change the masts with their loading coil could be installed in their mounts much easier. This change was agreed to.
3. Removal of the storage cabinets and storing the spare parts and equipment below the operating positions. This would lower the center of gravity of the van, and also eliminate the aluminum frames that hold the cabinets. This change cannot be decided until they make a study of the cubic space needed for the storage of the spare parts and equipment.
4. Relocating the intake and exhaust fans. They suggested, if we are not going to use air conditioning, that for proper ventilation of the van one large exhaust fan should be installed on the front of the van instead of two fans, one exhaust and one intake. The engineers are going to conduct a comprehensive study to determine the amount of ventilation necessary with three men in the van and the equipment in operation. 25X1A5A1
5. The security office requires that the rear door of the van cannot be locked by anyone from the outside when personnel are in the van. The outside and inside latch on the rear door of the Air Force van operate independently of each other. With the rear door closed, the pins in the hinges of the door may be removed from inside the van; therefore, the door and the latch on the Air Force van meet our requirements.
6. They suggested installation of the power panel on the inside rear wall of the van instead of the inside right wall of the van. This modification complies with the Air Force van. The input power receptacles would then be located on the rear of the van instead of one the side. This modification was agreed to.

7. If possible, the placement of the antenna output connectors all in one location either on the rear or front of the van was recommended instead of four connectors on one side of the van and four on the other side. This change cannot be determined until the final placement of equipment is established.
8. All the other requirements will be met as stated in our specifications.

8. Wednesday morning, July 10, was spent conversing with [] to establish a time schedule on the production and installation of the equipment within the van, in order that the ninety day delivery date will be met without delay. Their anticipated course of action is as follows: They will conduct two studies; one study to ascertain the cubic storage space required for the spare parts; the second study will be the amount of ventilation necessary for the van. After that, they will make rough sketches of how they believe the equipment should be installed and how the van should be constructed. After the arrival of the Government Furnished Property, they will make a "mock-up" of the equipment within the van. At that time it will be viewed by the Agency Project Engineer and the [] Project Engineer to determine if the layout as shown on our drawings is feasible from the weight distribution and the human engineering standpoint. After viewing the "mock-up" and sketches, and determining the necessary changes on the van, they will then know at what point along their assembly line they will have to make modifications in the Air Force van to meet our specifications.

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Project Engineer